

1 at step 30 and then continues playing files based on the timing
2 schedule as indicated in the computer loop formed by steps 32,
3 34, 36, and back to step 30 until the last image/sound is
4 played. After the desired relative or absolute times, which are
5 indicated at 36, these times are utilized to control a sequence
6 of displays/sounds for successive images/sounds 34. This
7 terminates when the last image is determined. Prior to the last
8 image, decision box 32 requires computer control to stay within
9 the loop formed by steps 32, 34, 36, and 30 because the answer
10 to decision box 32 will be NO as indicated. Since all computers
11 are synchronized by the timing function, the overall
12 presentation is presented by a combination of all computers.
13 Where multiple displays are provided on a single computer, then
14 there are preferably multiple instances of computer program 10
15 running simultaneously and independently. The aforesaid term
16 "multiple instance" refers to instances of copies of computer
17 program 10 being replicated for simultaneous and independent
18 execution as redundant copies in the computer system's random
19 access memory (RAM). The replication of copies of a software
20 program in RAM may be performed by the conventional and well
21 known practice of transferring of the program from a single copy
22 in the computer's magnetic disk memory into different locations
23 in the RAM. In such case scenario, file 18 contains a set of a

1 corresponding multiplicity of timing, image/sound, and other
2 playing or processing) files to operate with the respective
3 copies of the program in RAM. Alternatively, an option could be
4 provided within a single program 10 for specifying multiple
5 displays. However utilizing multiple copies of the same program
6 in RAM to enable their simultaneous and independent execution
7 has been found to be a simpler approach.

8 If the last image is displayed as indicated at decision box
9 32, then the answer to decision box 32 takes the YES route
10 whereupon the loop count is incremented as indicated at 38. If
11 the loop count is equal to the specified display loop count as
12 per step 20. Then at decision box 40, program 10 proceeds by
13 the YES route and stops the presentation at step 42. If the
14 incremented loop count is not equal to the display loop count
15 specified at step 20, then the first image is loaded into memory
16 at step 44, the timing is determined and program 10 plays each
17 scenario file as discussed above over as discussed above until
18 the incremented loop count reaches the loop count specified in
19 step 20.

20 By utilizing program 10 on each respective computer, with
21 the respective image/sound files preferably stored on each
22 respective computer, and preferably with the respective scenario
23 file stored on each computer, then precisely timed displays of

1 images on multiple display monitors connected to one or many
2 like or dislike (because as discussed above program 10 is
3 preferably written in a platform independent language) commonly
4 timed computers is now possible. This new capability allows
5 easy scripting of a variety of different realistic time
6 sequenced display images of, for example, new submarine combat
7 control system displays for concept evaluation, training, and/or
8 other purposes. Differences in image display performance make
9 it difficult or impossible to synchronize the display on dislike
10 systems without use of computer program 10 taught in accord with
11 the present invention. Computer program 10 provides a self-
12 healing timing algorithm that catches up on systems with slower
13 display performance giving the best synchronization possible.
14 Multiple instances of computer program 10 operating on multiple
15 dislike computers execute uniformly and reliably to produce a
16 unique type of presentation by using complex computer systems
17 such as computer complex 100 with up to N computers.

18 It will be understood that many additional changes in the
19 details, materials, steps and arrangement of parts, which have
20 been herein described and illustrated in order to explain the
21 nature of the invention, may be made by those skilled in the art
22 within the principle and scope of the invention as expressed in
23 the appended claims.